

Preliminary Amendment
National Stage of PCT/JP2005/000694
Attorney Docket No. Q96124

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (original) A quantum dot-dispersed light emitting device comprising:
a substrate;
an electron injection electrode;
a hole injection electrode; and
an inorganic light emitting layer disposed so as to be in contact with both the electrodes,
wherein the inorganic light emitting layer
includes an ambipolar inorganic semiconductor material and nanocrystals dispersed as
luminescent centers in the ambipolar inorganic semiconductor material, and
is configured without having, at the interface with the electron injection electrode and/or the hole
injection electrode, epitaxial relation therewith.
2. (original) The quantum dot-dispersed light emitting device according to claim 1,
wherein the ambipolar inorganic semiconductor material is an amorphous semiconductor phase.
3. (original) The quantum dot-dispersed light emitting device according to claim 1,
wherein the ambipolar inorganic semiconductor material is a polycrystal semiconductor phase.
4. (currently amended) The quantum dot-dispersed light emitting device according to claim 1
~~any of claims 1 to 3~~,
wherein the inorganic light emitting layer comprises a ZnS type semiconductor phase.

5. (original) The quantum dot-dispersed light emitting device according to claim 4,
wherein the inorganic light emitting layer comprises $Zn_pM_{1-p}S_xSe_yTe_{1-x-y}$ (where $0 \leq x, y, x + y \leq 1, 0 < p \leq 1$, M: alkaline-earth metal, Cd).

6. (currently amended) The quantum dot-dispersed light emitting device according to claim 4
~~claim 4 or 5~~,

wherein the nanocrystals contain any of InP, GaAs, and GaP as a main component.

7. (currently amended) The quantum dot-dispersed light emitting device according to claim 1
~~any of claims 1 to 3~~,

wherein the hole injection electrode comprises Cu-doped $Zn_pM_{1-p}S_xSe_yTe_{1-x-y}$ (where $0 \leq x, y, x + y \leq 1, 0 < p \leq 1$, M: alkaline-earth metal, Cd).

8. (currently amended) The quantum dot-dispersed light emitting device according to claim 1
~~any of claims 1 to 3~~,

wherein the substrate is a glass substrate.

9. (currently amended) The quantum dot-dispersed light emitting device according to claim 1
~~any of claims 1 to 3~~,

wherein the electron injection electrode and the hole injection electrode are disposed spaced apart from each other, with the inorganic light emitting layer interposed therebetween, in a lamination on the substrate.

10. (currently amended) The quantum dot-dispersed light emitting device according to claim 1
~~any of claims 1 to 3~~,

wherein the electron injection electrode and the hole injection electrode are disposed spaced apart from each other in a plane on the substrate.

11. (currently amended) The quantum dot-dispersed light emitting device according to claim 1 ~~any of claims 1 to 3,~~

wherein a gate electrode is disposed between the electron injection electrode and the hole injection electrode.

12. (currently amended) A display apparatus comprising the quantum dot-dispersed light emitting device according to claim 1~~any of claims 1 to 3.~~

13. (currently amended) An illumination device comprising the quantum dot-dispersed light emitting device according to claim 1~~any of claims 1 to 3.~~